



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/594,596 06/15/00 ANDERSEN S 38-21 (15879)

LAWRENCE M LAVIN JR ESQ
MONSANTO COMPANY
PATENT DEPARTMENT E2NA
800 N LINDBERGH BOULEVARD
ST LOUIS MO 63167

HM22/1003

EXAMINER

ARTHUR, L

ART UNIT

PAPER NUMBER

1655

DATE MAILED:

10/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/594,596

Applicant(s)

ANDERSEN ET AL.

Examiner

Lisa B. Arthur

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ^{one 10/1/01 lba} 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) 1-9 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

Art Unit: 1655

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- | | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Groups 1-10,952. | Claim 1 in part, drawn to one of a nucleic of SEQ ID NO 1-10,952, classified in class 536, subclass 23.6. If Group I is elected, then a nucleic acid of SEQ ID NO 1 will be examined and if group 10,952 is elected then a nucleic acid of SEQ ID NO 10, 952 will be examined. |
| Groups 10, 953-21,904. | Claim 2 in part, drawn to one of a wheat polypeptide encoded by SEQ ID NO 1-10,952 , classified in class 530, subclass 370. If Group 10, 953 is elected, then a protein encoded by a nucleic acid of SEQ ID NO 1 will be examined and if group 21,904 is elected then a polypeptide encoded by a nucleic acid of SEQ ID NO 10, 952 will be examined. |
| Groups 21, 905-32,857 | Claims 3-9 in part, drawn to a transformed plant containing the nucleic acid of SEQ ID NO 1-10952, classified in 435, subclass 410. If Group 21, 905 is elected, then a plant transformed with a nucleic acid of SEQ ID NO 1 will be examined and if group 32,857 is elected then a plant transformed with a nucleic acid of SEQ ID NO 10, 952 will be examined. |

Art Unit: 1655

The inventions are distinct, each from the other because:

The nucleic acids of Groups I-10,952 are patentably distinct from one another because each nucleic acid has a distinct structure and therefore has a distinct function, i.e. the detection of a different nucleic acid in a nucleic acid hybridization assay. Also, each nucleic acid encodes a different amino acid sequence. Therefore, each nucleic acid of SEQ ID NO 1-10,952 is novel and unobvious over one another.

The polypeptides of Groups 10,953-21,904 are also patentably distinct from one another because each polypeptide is structurally distinct, i.e., has a distinct amino acid sequence, and therefore are functionally distinct since the function of a polypeptide is inherent in its amino acid sequence. Therefore, each polypeptide encoded by each sequence of SEQ ID 10,953-21,904 is novel and unobvious over one another.

The plants of Groups 21,905-32,857 are patentably distinct from one another because each plant contains a nucleic acid which is structurally and functionally distinct. Furthermore, each plant has a different function because each nucleic acid which the plants have been transformed encoded different polypeptides. Therefore, each plant is novel and unobvious over one another.

The nucleic acids of Groups 1-10-952 are patentably distinct from the polypeptides of groups 10,953-21,904 and the plants of groups 21,905-32,857 because the nucleic acids are structurally and functionally distinct from both the polypeptides and the plants. Furthermore, the polypeptides and plants are structurally and functionally distinct from one another.

The nucleic acids are composed of nucleotides linked by phosphodiester bonds and arranged in a double helix while the polypeptides and antibodies are composed of amino acids linked by peptide bonds and arranged in complex configurations of alpha helices, beta-pleated sheets and hydrophobic domains. The structures of the nucleic acids and polypeptides are distinct from that of the plants because the plants are multicellular. The nucleic acids can function in hybridization and amplification assays, while the polypeptides can function in generation of polyclonal and monoclonal antibodies or in antibody detection assays. The plants can function as a food product. Therefore, the nucleic acids, polypeptides and plants are all novel and unobvious over one another.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

Art Unit: 1655

Applicant should note that the nucleic acids, polypeptides, and plants having the sequences of SEQ ID NO 1-10,952 have been restricted from one another rather than being separated as different species of a genus because the claims were written in an improper Markush format. Each of the sequences given in SEQ ID NO 1-10,952 are mutually exclusive from one another having completely different structures and functions as discussed above and therefore are considered to be separate and restrictable inventions.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

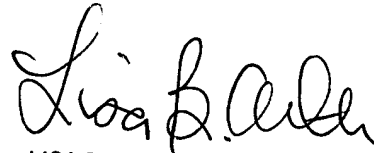
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa B. Arthur whose telephone number is 308-3988. The examiner can normally be reached on Monday-Wednesday from 7:00 am to 2:30 pm.

Art Unit: 1655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for the organization where this application or proceeding is assigned is 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0196.



LISA B. ARTHUR
PRIMARY EXAMINER
GROUP 1800 (600)
October 1, 2001